

Amendment

Reply to Office Action dated May 1, 2007

AMENDMENTS TO THE CLAIMS

This listing will replace all prior versions, and listings, of claims in the application:

1. (Currently amended) A system for improving the fixation of proximal fractures of the humerus, including at least [[a]] one humeral nail to be inserted in a humeral shaft and comprising at least one proximal transversal holes transverse hole for the passage of a corresponding locking screws screw, at least a screw of said locking screws screw having a screw head and a screw body;

the system further including at least [[an]] one intermediate plate element inserted between said screw head and the bone cortex surface so that the screw head is abutting against abuts said plate;

wherein said intermediate plate element comprises an enlarged flange portion and two elongated arm portions extending from the flange portion, the arm portions defining a longitudinal direction,

wherein said intermediate plate element is slightly bent curved in the longitudinal direction to adhere substantially to the bone cortex surface, and

wherein said comprises a couple of elongated arm portions that are inserted in an can be positioned astride position on the screw body before the final fastening of the screw head;

wherein the intermediate plate element is an open washer integrally formed with a flange portion.

2. (Cancelled)

3. (Currently amended) System according to claim 1, wherein said enlarged arm portions present rounded ends.

4. (Currently amended) System according to claim 1, wherein said enlarged flange portion of said intermediate plate element comprises an enlarged portion having at least defines a seat for embracing at least a fragment fixation pin.

5. (Currently amended) System according to claim 4, wherein said seat is at least a includes at least one hole formed in said enlarged flange portion of the intermediate plate element.

6. (Currently amended) System according to claim 4, wherein said seat is at least a includes at least one hole formed in at least one of said elongated arm portions.

7. (Previously presented) System according to claim 1, wherein said intermediate plate element has a substantially rounded profile.

8. (Cancelled)

9. (Previously presented) System according to claim 1, wherein a second intermediate plate element is inserted between the screw head of a second locking screw and the bone cortex surface.

10. (Previously presented) System according to claim 9, wherein said second intermediate plate element is larger than a first intermediate plate element.

11. (Currently amended) System according to claim 9, wherein said second intermediate plate element comprises a couple of two elongated arm portions that can be positioned are inserted in an astride position on the screw body.

12. (Currently amended) System according to claim 9, wherein said first intermediate plate element comprises a couple of two elongated arm portions that can be positioned are inserted in an astride position on the screw body before the final fastening of the screw head and said

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second intermediate plate element comprises a couple of two elongated arm portions that are longer than the arm portions of said first intermediate plate element.

13. (Currently amended) System according to claim 1, wherein at least one of said transversal transverse holes has an internal partially threaded portion and the corresponding screw has an outside thread diameter smaller than the diameter of said at least one transversal transverse hole that receives such a screw.

14. (Currently amended) System according to claim 13, wherein said at least one of said transversal transverse holes comprises a couple of opposite holes on opposite wall of a cannulated nail and the hole closer to the screw head includes said partially threaded portion.

15. (Currently amended) A fastening device for improving the fixation of proximal fractures of the humerus, of the type structured to work with at least [[a]] one humeral nail to be inserted in a humeral shaft and comprising at least proximal transversal transverse holes for the passage of corresponding locking screws, at least one screw of said locking screws having a screw head and a screw body;

said device comprising an intermediate plate element to be inserted between said screw head and the bone cortex surface for enlarging the abutting area of the screw head;

wherein said intermediate plate element comprises an enlarged flange portion and two elongated arm portions extending from the flange portion, the arm portions defining a longitudinal direction,

wherein said intermediate plate element is slightly bent curved in the longitudinal direction to adhere substantially to the bone cortex surface, and

wherein said eomprises a couple of elongated arm portions that are inserted in an can be positioned astride position on the screw body before the final fastening of the screw head;

wherein the intermediate plate element is an open washer integrally formed with a flange portion.

16. (Cancelled)

17. (Currently amended) Fastening device according to claim 15, wherein said enlarged arm portions present rounded ends.

18. (Currently amended) Fastening device according to claim 15, wherein said enlarged flange portion of said intermediate plate element comprises an enlarged portion having at least defines a seat embracing at least [[a]] one fragment fixation pin.

19. (Currently amended) Fastening device according to claim 18, wherein said seat is includes at least [[a]] one hole formed in said enlarged flange portion of the intermediate plate element.

20. (Currently amended) Fastening device according to claim 18, wherein said seat is includes at least [[a]] one hole formed in at least one of said elongated arm portions.

21. (Previously presented) Fastening device according to claim 15, wherein said intermediate plate element has a rounded profile.

22. (Cancelled)

23. (Currently amended) A method for reducing proximal fractures of the humerus by using a humeral nail to be inserted in a humeral shaft and comprising at least proximal transversal transverse holes for the passage of corresponding locking screws, at least [[a]] one screw of said the locking screws having a screw head and a screw body; the method including the steps of:

a surgery phase producing an incision in the muscle surrounding the bone during a surgery phase to access a humeral fracture; and to the fractured, and wherein

inserting at least [[an]] one intermediate plate element is inserted between said the screw head and the bone cortex surface before the final fastening of the screw so that the head is abutting against said the plate[[;]]

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wherein the intermediate plate element comprises an enlarged flange portion and two elongated arm portions extending from the flange portion, the arm portions defining a longitudinal direction,

wherein the intermediate plate element is slightly bent curved in the longitudinal direction to adhere substantially to the bone cortex surface, and

wherein the eomprises a couple of elongated are arm portions that are inserted in an are positioned astride position on the screw body before the final fastening of the screw head;

wherein the intermediate plate element is an open washer integrally formed with a flange portion.